



UNITED STATES PATENT AND TRADEMARK OFFICE

Commissioner for Patents
United States Patent and Trademark Office
P.O. Box 1450
Alexandria, VA 22313-1450
www.uspto.gov

OCT 25 2005

In re Application of: Kim :
Appl. No.: 10/676,643 : DECISION ON PETITION
Filed: October 1, 2003 :
For: Apparatus and Method for Slurry Flow Control :

This is a decision on the petition filed on March 28, 2005 by which petitioners request supervisory review of, and withdrawal of, the examiner's election of species requirement as set forth on September 24, 2004, traversed by petitioners on October 26, 2004, and defended but *not made final* in the Office action of December 2, 2004. As the examiner's action of December 2, 2004 withdrew non-elected claims from prosecution, it is being construed as issuing a final restriction requirement in order to provide for consideration of the instant petition. The petition is considered pursuant to 37 CFR 1.144 and 37 CFR 1.181, and no fee is required.

The petition is granted.

Review of the application and of the claims shows that the claimed invention is an apparatus/method to control slurry flow in a chemical mechanical polishing apparatus. Two embodiments appear to be disclosed. The first embodiment, shown in figures 2-4 includes (in short) (A) a slurry supply unit, (B) a photo image sensor, (C) a slurry measuring unit, and (D) a slurry flow control unit. Paragraph 21 suggests that a diluent solution may be added in this embodiment. The second embodiment, shown in figures 5-6, includes the all and exactly the same structure, adding only (E) a diluent solution supply unit. The disclosure teaches the diluent is supplied so that (B) the photo image sensor can accurately measure the cross-sectional image for slurry having a high concentration of particles (paragraph 30, paragraph 34). Therefore, element (E) enhances the operation of element (B). Originally filed independent claims 1 and 4 defined the apparatus/method as comprising elements (A, B, C, D) while independent claims 2 and 5 defined the apparatus/method as comprising (A, B, C, D, E).

The examiner required an election of species between the embodiments represented by Figures 4 and 6. The requirement translates to alleged species 1 defined by claims 1 and 4 and alleged species 2 defined by claims 2, 3 and 5-10. Petitioner provisionally elected, *with traverse*, species 1. Petitioner's traverse was unpersuasive in the examiner's view and applicant received an action on the merits of claims 1 and 4 with the remaining claims withdrawn from consideration. Petitioner's response to the Office action on the merits included a cancellation of claims 1 and 4 and the instant petition for relief from the election of species requirement.

The bulk of Petitioner's position that the election of species is procedurally improper in that it fails to meet the requirements of explaining why the inventions as claimed are either independent or distinct and fails to address the issue of serious burden upon the examiner. Respectfully, these

points are not well taken in that these requirements are necessarily set out in the election of species requirement and were¹ only specifically discussed by examiners when requiring an applicant to restrict between distinct inventions. Requirements for restriction between distinct inventions (related as disclosed) are described in MPEP 806.05-806.05(i) and necessarily require justification. However, MPEP 808.01(a) proscribes the definition of species as "Where there is no disclosure of relationship between species (MPEP 806.04(b)), they are independent inventions and election to one invention following a requirement for restriction is mandatory even though applicant disagrees with the examiner. There must be a patentable difference between the species as claimed. See MPEP 806.04(h). Since the claims are directed to independent inventions, restriction is proper pursuant to 35 USC 121 and it is *not necessary to show a separate status in the art or separate classification*(emphasis added). Therefore, arguments to the procedural failure of an election of species requirement for not explaining the relation between inventions or providing an allegation of serious burden are not persuasive here.

Petitioner also maintains traversal of the requirement for election of species on a substantive issue in that he points out the claims as presented are not mutually exclusive. This point was not discussed or countered by the examiner in the response to traversal and as considered herein is found persuasive.

In order for species of an invention to be present as claimed, the species must be patentably distinct from each other and the claims to be restricted to different species must be mutually exclusive. As correctly opined by Petitioner, the general test as to when claims are restricted, respectively, to different species is the fact that one claim recites limitation which under the disclosure are found in a first species *but not in a second*, while a second claim recites limitations disclosed *only* for the second species and *not* for the first (MPEP 806.04(f)). When comparing the disclosure/claims herein using the shorthand outlined above one finds alleged species 1 (A,B,C,D) with a disclosure suggesting E, and alleged species 2 (A,B,C,D,E). It is clear that the claims fail to pass muster under the general test and are not mutually exclusive.

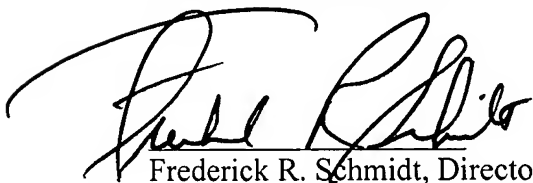
It appears as though the application was originally filed with claims of varying scope defining the invention rather than any disclosure and claiming of independent or distinct inventions. Applicant has invented a chemical-mechanical polishing apparatus with the improvement of (broadly) a combination including element B for detecting slurry concentration, and (specifically) the same combination also including element E added to enhance element B's function. The fact that applicant chose to describe the invention in the specification using different figures and designating one as 'embodiment 1' and one as 'embodiment 2' does not transform the disclosure into multiple inventions capable of supporting separate patents. Viewed from a different approach, had applicant only presented claims to ABCD and after examination applicant amended the claims to recited ABCDE, this would have been viewed as a narrowing amendment to overcome prior art and not the presentation of a claim to an independent or distinct invention.

¹ It is noted that the most recent version of the MPEP dated August 2005 has been revised to include a requirement for the examiner to specifically address the issue of serious burden should either an election of species between independent inventions or a restriction between independent or distinct inventions be made. This however was not the procedure proscribed by the MPEP at the time of issuance of the original requirement herein.

For the reasons outlined above, the election of species requirement promulgated and construed as being made final is not in accordance with proper Office procedure. Accordingly, it is hereby vacated.

As a further procedural note, Petitioner properly and timely responded to the first office action with the amendment and petition of March 28, 2005. The notice of non-responsive amendment mailed by the Office on July 1, 2005 was premature as the disposition of the application was contingent upon this petition decision. As this petition grants Petitioner relief from the election of species requirement, the amendment presented March 28, 2005 is deemed responsive and the notice of non-responsive amendment also hereby vacated. The application is being forwarded to the Supervisory Patent Examiner of Art Unit 3723 who will have the examiner promulgate an action on the merits of the presently pending claims not inconsistent with this Decision. Such can not be considered a shift of invention when in fact only one invention was originally claimed.

PETITION GRANTED

A handwritten signature in black ink, appearing to read 'Frederick R. Schmidt', is written over a horizontal line.

Frederick R. Schmidt, Director
Technology Center 3700

James A. Flight
HANLEY, FLIGHT & ZIMMERMAN, LLC
Suite 4220
20 North Wacker Drive
Chicago, Illinois 60606